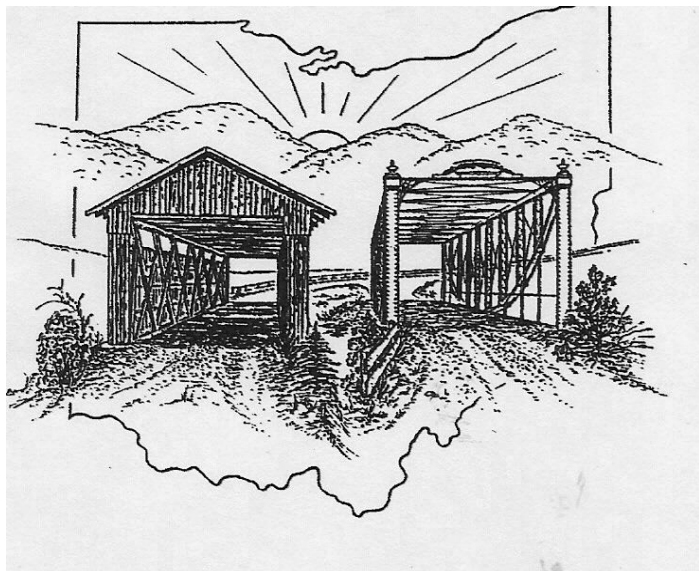


## Latest Ohio Historic Bridge News



# *Bridges and Byways*

*Journal of the*

Ohio Historic Bridge Association  
Volume XXXVII  
Winter 2023  
Number 1

### Meeting Notes:

**March 19, 2023 1:30 pm**

**Speaker:** David Geckle, ODOT District 2 Bridge Engineer

**Topic:** Anthony Wayne Bridge Rehabilitation and Dehumidification Project

**Place:** Ohio History Connection 800 E. 17th Avenue, Columbus, OH (Exit 111 off I-71)  
Meeting is in the Cardinal Room on the third floor.

**May 20, 2023 (Saturday) 10:00 am**

**Spring Bridge Tour:** Southern Fairfield County, meeting place TBA

**July 16, 2023 noon**

**Summer Picnic Salt Creek Covered Bridge Entertainment: The Bridgers Acoustic String Band**

**September 16, 2023:**

**Fall Bridge Tour, TBA**

**November 19, 2023:**

**Business Meeting**

**Speaker: TBA**

**Place:** Ohio History Connection in the Cardinal Room on the third floor.

### Contents:

**The President's Span:**

**Doug Miller.....2**

**Through Ohio's Trusses**

**David Simmons.....3-4**

**New Officers.....4**

**Fall Bridge Tour.....5-6**

**Breaking Bridge News.....6**

**OHBA Officers and Membership**

**Information.....7**

**Renewal subscriptions are due by January 15, 2023. See page 7 for details.**

Your mailing label has your subscription date above your name.

The OHBA Web site is now available at [www.oldohiobridges.com/new/OHBA](http://www.oldohiobridges.com/new/OHBA)

OHBA is a not-for-profit organization incorporated in the State of Ohio and is recognized as a non-profit organization under 501 (c) 3 of the Internal Revenue Code.

The OHBA mailing address is

**Ohio Historic Bridge Association  
PO Box 153  
Galena, OH 43021-0153**

## The President's Span.....Doug Miller



As I look back at my first year as your president, I can understand just how busy David was, and I can better appreciate all of his efforts. While I thought I could gradually ease into the position, it has been far from easy or gradual. We have been very busy with historic coordination assisting Zanesville to find funding to move a wrought iron pony truss from Morrow County, advising Newton Falls to replace damaged or missing rivets in-kind as well as discussions with ODOT regarding saving the Dresden Suspension Bridge. It is our intent to assist in the preservation of as many historically significant bridges as we can.

In June 2022, I attended a Covered Bridge Summit in Oxford, NY, along with covered bridge association officers representing New York, Pennsylvania, Vermont, Virginia, Indiana, Ohio, and the National Society for the Preservation of Covered Bridges. It was the second summit I have attended. The mayor of Oxford welcomed us, and he indicated he wants to build a new Burr Arch truss bridge in Oxford to commemorate Theodore Burr and link a recreation path on either side of the Chenango River. There were many interesting presentations that could be helpful to our organizations. The National Register Signage Program suggested placement of markers at covered bridges listed on the Register that is funded by the William C. Pomeroy Foundation. OHBA could take a more proactive role in getting such signage on our bridges. Digital collections, scanning photos and post-cards were other topics of interest. Our own Terry Miller and his colleague Ron Knapp spoke on their book "Theodore Burr and the Bridging of Early America" available later this year. It covers Theodore Burr's persona in life and bridges. And finally, Bill Caswell of The National Society distributed a draft of a booklet titled "An Introductory Guide to Covered Bridges" for beginning bridgers. We were able to suggest some comments and it has now been published. I have copies if you are interested.

This past November I had the opportunity make a presentation at the dedication of the Great Stone Viaduct in the Village of Bellaire, Ohio. The viaduct was built in 1870-71 with 43 stone arches by the B&O Railroad. In 1996, the current owner, CSX, abandoned a portion of the viaduct and 22 of the arches were acquired by the Great Stone Viaduct Historical Education Society. Recently, the village rehabbed the structure, and added a walking/bike path adjacent to the viaduct and a concrete observation platform on top of it. The society has added bronze plaques on the walk below with names of donors. A video of the presentation can be found here: [Great Stone Viaduct Plaza & Trail Dedication - YouTube](#) .

And last, I want to welcome our two new officers; replacing Ed Chapdelaine as 1<sup>st</sup> Vice President will be Bill Vermes, PE, of Strongsville. Bill is a professional engineer specializing in preservation of historic bridges and bridge inspection. He has worked on the preservation of many large significant bridges in Ohio. He has been a member of our organization for many years. Replacing Elma Lee Moore as 3<sup>rd</sup> Vice President will be Matt Haldiman of Dublin. Matt is a pharmacy manager at Riverside Methodist Hospital in Columbus. Short bios of both officers are located elsewhere in this newsletter. We want to thank Ed and Elma Lee for their services to our group. We are looking forward to working with Bill and Matt. Be sure to attend our March meeting where we will hear about a very interesting project on the Anthony Wayne Suspension Bridge in Toledo. Presenting will be Dave Geckle, PE, District Bridge Engineer from ODOT District 2 in Bowling Green.

Doug Miller, PE  
President

**State Resource in Licking County**

The bridge across Raccoon Creek on Cherry Valley Road on Newark's west side is among Ohio's most unusual structures. Known locally as the Showman Arch Bridge, Joe Charles pointed out at the annual meeting last November that the bridge is currently closed and plans for a replacement are currently in design. Remarkably, the structure dates back to the state's canal era.



**From the side, the Cherry Valley Road Bridge appears to be a run-of-the mill concrete arch bridge. Photo courtesy Rod Lemasters**

The canal system was Ohio's first large-scale state-administered and state funded public works project.

The National Road construction in Ohio predated it, but it was a federal project. Surveys of the canal began in 1822, construction was initiated three years later and, although work on various segments dragged on, by 1835 major portions were complete. The mere existence of structures from this earliest period of Ohio's canal history is extraordinary, even more unusual is that some have successfully carried modern traffic loads.

The Raccoon Creek Aqueduct in Licking County is such a structure. A three-span stone arch bridge measuring 140 feet overall, it was built in 1835 to carry water to one of several summit levels on the Ohio & Erie Canal. Until recently, it carried the traffic of Cherry Valley Road that originally connected Newark-Granville Road and West Main Street. Creation of the Thornwood exit off SR 16 has realigned traffic onto the old Cherry Valley Road right-of-way, resulting in an extremely busy artery.

The aqueduct was part of the Granville Feeder, a water supply running about six miles from Raccoon Creek in Granville to the main line of the canal near Hebron. The need for water was always greatest in a canal summit level, since gravity supplied the canal to the north and south. The Granville Feeder was part of the original construction contracts and, along with Licking Reservoir (now Buckeye Lake), augmented the water in the summit. Because there were several mills and an iron furnace near the Granville end of the feeder, it was, like the Columbus Feeder south of Columbus, designed to be navigable. The first structure at this crossing of Raccoon Creek had a wooden superstructure supported by a stone pier and abutments, but it was destroyed in a July 1834 flood. Josiah Spaulding, a Zanesville stonemason, built the present stone aqueduct to replace the original wooden structure.

The 1835 aqueduct's use by the canal system was comparatively short-lived. With the expansion of the Licking Reservoir in 1836, Raccoon Creek was no longer needed for water on the summit. In addition, the iron furnace, which provided the primary traffic on the feeder, went out of blast only a few years later. Therefore, the feeder saw very little activity except as a water source for several mills. In the late 1880s, an interurban line—a part of the Ohio Electric Railway system—was established between Granville and Newark. It adopted the old canal

## Through Ohio's Trusses, continued..... David A. Simmons

feeder right-of-way, in particular the towpath, for the route. About the same time, Cherry Valley Road was created and, in lieu of building a new bridge over Raccoon Creek, the old canal bed on top of the aqueduct was filled in to become the roadway. Once a canal structure, the aqueduct was converted to a combination road and rail bridge. In 1923, the railway was discontinued, a victim of the automobile, with which it shared the old aqueduct. The Works Progress Administration rebuilt the spandrel walls and icebreakers with concrete in 1941. Although the northeast approaches failed some time later and were rebuilt with timbers, the aqueduct remains substantially as built in 1835 and modified in 1941.



***A close look at the interior of the arches reveals their original canal design of cut stone laid up on a wooden cribbing and platform in 1835.***

While there are a number of canal culverts still standing in Ohio—several of which are used for highway purposes—only a handful of aqueducts remain, and none are on the scale of this structure. Because most aqueducts in the state were built with wooden trusses and troughs, the stone arches of this example, along with its continued use as a rail and then highway bridge, led to its long-term preservation. This may, in fact, be the only structure standing in the state that has a multiple history of canal, rail, and highway use.

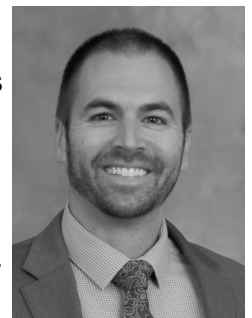
Newark has a well-developed trail system, some of which runs nearby Cherry Valley Road. Incorporation into these trails would be a genuine asset for the system and provide an opportunity for the long-term preservation of this unique bridge.

## New Officers.....Doug Miller and Elma Lee Moore

**Bill Vermes** (First Vice President) is a Northeast Ohio bridge engineer specializing in bridge inspection and bridge rehabilitation. He has worked on numerous award-winning rehabilitations of Ohio historic bridges, including the Lorain-Carnegie Bridge (now known as the Hope Memorial Bridge) and Detroit-Superior Bridge (both in Cleveland), the Blaine Hill Viaduct (Belmont County) and the Richland Avenue Bridge (Athens). Among his historic bridge interests, he has written papers discussing the performance of rivets on bridges, the development of high-strength nickel steel, and is currently researching pre-1950 bridge construction in Oklahoma. Bill is the bridge engineer for the Portage County Engineer's Office and is the founder of This Old Bridge, LLC. He lives in Strongsville, Ohio.



**Matt Haldiman** (Third Vice President) is originally from Seville, in Northeast Ohio. He graduated from Ohio Northern University College of Pharmacy. He is currently a pharmacy manager at Riverside Methodist Hospital in Columbus. He became interested in bridges/covered bridges in 2008 during college, and visited all the Ohio bridges listed in Dale J Travis' site. He enjoys going back after rehabs and tries to attend ribbon cuttings for new builds. In addition he has visited covered bridges in 12 states and loves a good road trip to see more. His bucket list bridge trips include New Brunswick, Madison County Iowa, and New York. Matt is married with an 8-year old daughter and 6-year old son.



## Fall Tour: Scioto Co., OH and Greenup County, KY..... Elma Lee Moore, David Simmons, and Doug Miller

Our tour this Fall was unusual in that we left Ohio and ventured into Kentucky. We travelled into Kentucky in a previous tour but that was just crossing the Roebling Bridge and then returning back to Ohio. The first bridge visited was one of OHBA members' favorites The **Otway Covered Bridge (OH/35-73-15)** We were greeted by members of the Otway Historical Society (OHS). They welcomed us with a spread of pastries, coffee, and soft drinks. Herb Irwin of the OHS gave a presentation about the rehabbing of the bridge. A scrapbook was available to view history about the bridge. On a previous tour, the OHS greeted us similarly with a picnic lunch and regaled us with history of the area, especially about Roy Rogers. The bridge was built over Scioto Brush Creek in 1884 as a 129-foot Smith truss. In 1923, a low steel bridge was added to the eastern end. The bridge was rehabbed recently. Efforts in the 1960s to preserve the Otway bridge were among the state's earliest.



From Otway we continued to Portsmouth. We drove through the **Boneyfiddle Historic District** (listed on the National Register of Historic Places) and then proceeded to the **Portsmouth Floodwall Murals**. This outdoor gallery depicts the history of Portsmouth and the area. There are 60 murals standing 20 feet high and stretching for 2,090 feet. Robert Dafford of Lafayette, Louisiana began the on-going painting project in 1993. Parking is limited to the street running near the murals so we just drove past. (Photo from [Ohio Find It Here](#))

We then crossed the Ohio River and into Kentucky on the **U.S. Grant Bridge**. Built from 2001 to 2006, it was the first cable stayed bridge built for the Ohio Department of Transportation. The suspended spans stretch for 1,685 feet with towers of more than 300 feet high.



The first Kentucky Bridge – **Bennett's Mill Covered Bridge (KY/17-45-06)** is a 155-foot Wheeler truss over Tygarts Creek. It was built in the 1870s to serve a mill. This bridge has very unusual trusses using three chords and a unique subdivision of compression members. Isaac Wheeler of Sciotoville, Ohio patented this unusual system in 1870. Miriam Wood determined that five

Wheeler trusses were built in Scioto County, OH and one in Lawrence County, OH. This Kentucky bridge though is the only surviving example. The bridge was rebuilt in 2003 but only 15% of the original material could be salvaged.



We ate a picnic lunch at a very crowded Greenbo Lake State Park. Some bridgers ate at the Jesse Stuart Lodge restaurant.



Just across from the park was our next destination, the **Buffalo Furnace**. This charcoal iron furnace was originally constructed in 1851 and active during the Civil War was used for various other purposes until 1875 when it was sold to a farm and the machinery was dismantled and sold. OHBA had visited Buckeye Furnace in Jackson County, Ohio during a previous tour which had been reconstructed. It was interesting to see the unreconstructed Buffalo furnace.

( Photo: Elma Lee Moore)

We caught our President Doug Miller and helper David Simmons attempting to break into the next bridge – **The Oldtown Covered Bridge (KY/17-45-02)**. The entrances to the bridge were gated and locked. A local person came to open the lock. She explained that because of the rural location of the bridge that it was locked to prevent graffiti and vandalism. (Elma Lee made a note to include this as a method of preventing graffiti for her next presentation.) This 2-span, 188-foot multiple kingpost truss was built over Little Sandy Creek in

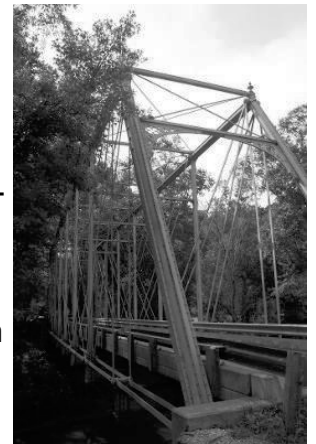


Photo: Elma Lee Moore



1880 for \$4,000 by an unknown contractor. It was bypassed in 1987. The bridge features two unequal spans. The 145-foot main span includes a double truss system while the shorter, 41-foot span uses a single truss system. The bridge was repaired in 1972-73 by the Green Thumb Environmental Beautification program providing jobs for eligible senior citizens.

Our final stop was a bridge using a little appreciated but important and influential system. **The Hopewell Bridge** was built in 1868 over the Little Sandy River by the Phoenix Iron Works of Phoenixville, PA (one of the largest iron manufacturers at the time). The compression members are all hollow Phoenix columns, created from semi-circular, rolled plates that are stitch-riveted together. This design was patented by Samuel J. Reeves in 1862 and became a highly successful and widely utilized structural system. (The system can be found in the elevator shaft of the Washington Monument on the National Mall in Washington, DC.) A local person who was driving by indicated that the Hopewell Bridge was once a railroad bridge from the Eastern Kentucky Railroad. (Unless otherwise noted, all photos for this article were by Doug Miller)



### Breaking Bridge News.....Elma Lee Moore and Doug Miller



On January 22, 2023, the **Jediah Hill Covered Bridge** in Hamilton County was struck by a snow plow with the bed up. Damage was done to the portal and siding and the first transverse brace. It has been temporarily braced with 2 x 4s and a chain. Last April it was severely struck by a vehicle which damaged one of the verticals and bent a steel plate which was reinforcing it. There is no word as to when the repair will be done. (Photos: Facebook posting)

## OHBA Officers & Membership Information

**President: Douglas D. Miller**, 7228 Pineview Dr., Englewood, OH 45322-2600 937-657-6356  
(cell ) dmiller94@woh.rr.com

**1<sup>st</sup> VP: Bill Vermes**, 12242 Webster Road, Strongsville, OH 44136 440-590-1976( cell)  
bvermes@ymail.com

**2<sup>nd</sup> VP: David Simmons**, Ohio Historic Bridge Association, PO Box 153, Galena, OH 43021-0153 740-965-4023 (home) everetsherman1877@gmail.com

**3<sup>rd</sup> VP: Matt Haldiman**, 9388 Jerome Road, Dublin, Ohio 43017 330-421-4813 (mobile)  
matt.haldiman@gmail.com

**Treasurer: Joseph W. Charles, Jr.**, 726 Newark-Granville Rd., Granville, OH 43023-1451, 740-587-2266, jcd43023@gmail.com

**Corres. Sec'y and Historian:** C/O David Simmons at address above.

**Rec. Sec'y: Janis Ford**, 1489 Denbigh Dr., Columbus, OH 43220-2632, jford3@columbus.rr.com

**Trustees: Ken & Linda Cash**, 1657 Spruce St., Zanesville, OH 43701, 740-453-3840

**Editor of Bridges & Byways: Elma Lee Moore**, 4489 Choctaw Trail, Jamestown, OH 45335  
937-675-9115 elmphd@aol.com

**Web Master: Pat Hoffmannbeck**, 2457 Willis Rd., Dublin, Oh 43016,  
614-579-3823 phoffmannb@gmail.com

---

**DUES:** Senior (age 55 and over) \$8; Student \$8; Single \$10; Family \$15; Contributing \$25; Supporting \$40; Life \$250. Annual dues include subscription to Bridges & Byways, quarterly journal of the OHBA. Dues period is the calendar year. Dues paid after October 1<sup>st</sup> cover the succeeding year. Renewal dues to be paid by 1/15.

Please fill out the membership application form below and send it with your check made out to the OHBA to **Mr. Joseph Charles at 726 Newark-Granville Rd., Granville, OH 43023-1451.**  
**Be sure to include your 9 digit zip code.**

I wish to join/renew (circle) membership with the OHBA.  
My name is \_\_\_\_\_

My mailing address is \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code( 9 digit) \_\_\_\_\_

My email address is \_\_\_\_\_  
My phone number is \_\_\_\_\_

Enclosed is my check made out to the OHBA in the amount of \_\_\_\_\_ for a \_\_\_\_\_ year senior/single/  
family/contributing/supporting/life/student (circle) membership.

Ohio Historic Bridge Association  
PO Box 153  
Galena, OH 43021-0153

First Class  
US Postage  
**PAID**  
Columbus Ohio  
Permit No 7536

**Return Service Requested**



**Fall 2022 Bridge Tour Attendees - Scioto County, OH and Greenup County, KY**

**Otway Covered Bridge, Scioto (OH/35-73-15)**

Photo : Herb Irwin/David Simmons